IBM

Personal Computer Hardware Reference Library

128KB Memory Expansion Option

6361670

128KB Memory Expansion Option

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Description

This adapter has 18 RAM modules (64K x 1) for a total capacity of 128Kb.

Memory Cycles

MEMR and MEMW commands require a 1-wait-state, 3-clock memory cycle. Data moves as a byte (8 data bits and 1 parity bit) or as a word (16 data bits and 2 parity bits) and is parity-checked on the adapter. A parity error causes an I/O channel check (non-maskable interrupt) to the system.

I/O Channel Check

When the I/O channel check occurs, a non-maskable interrupt (NMI) results, and the status bits determine the source (one status bit is I/O channel check, and the other is system board parity check). Writing to the failing card will clear the status bit.

Addressing

This adapter responds to addresses from hex 080000 to hex 09FFFF.

Specifications

Voltage Tolerances

The maximum variation of the +5 Vdc is ±5% at the adapter pins.

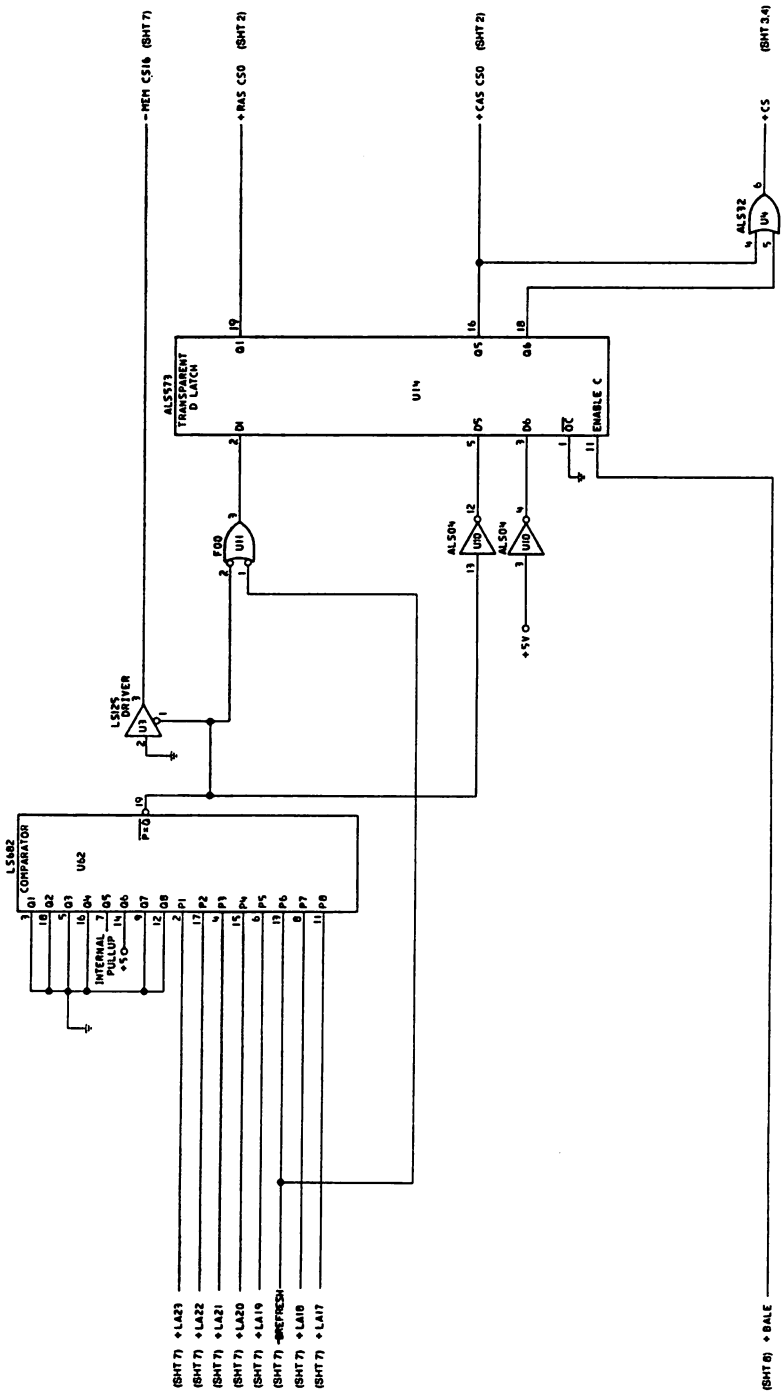
Power Dissipation

The +5-Vdc power used by the adapter is a maximum of 5.25 watts, and the maximum current used is 1 ampere.

Temperature Variation

The adapter will operate between 10 and 50 degrees Celsius (50 and 122 degrees Farenheit).

Logic Diagrams



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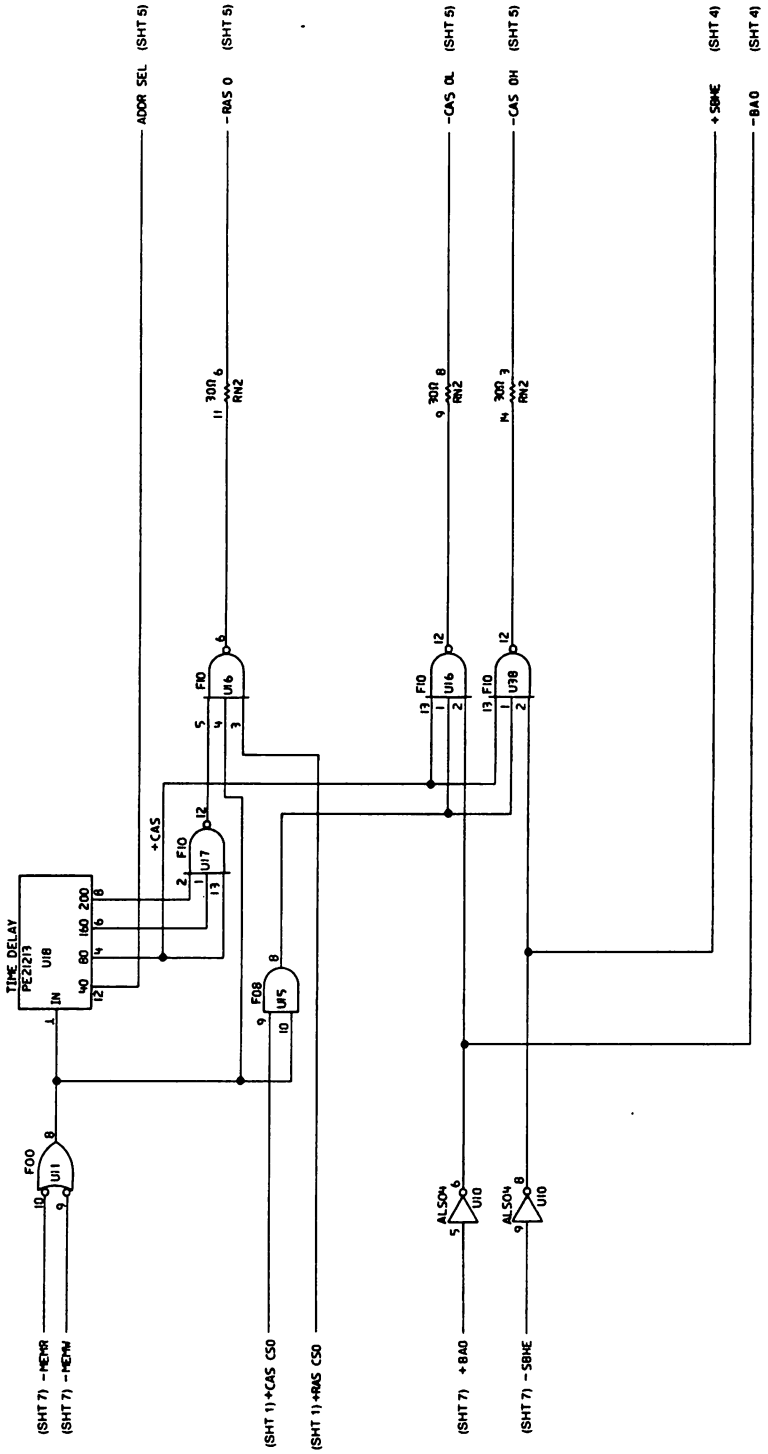

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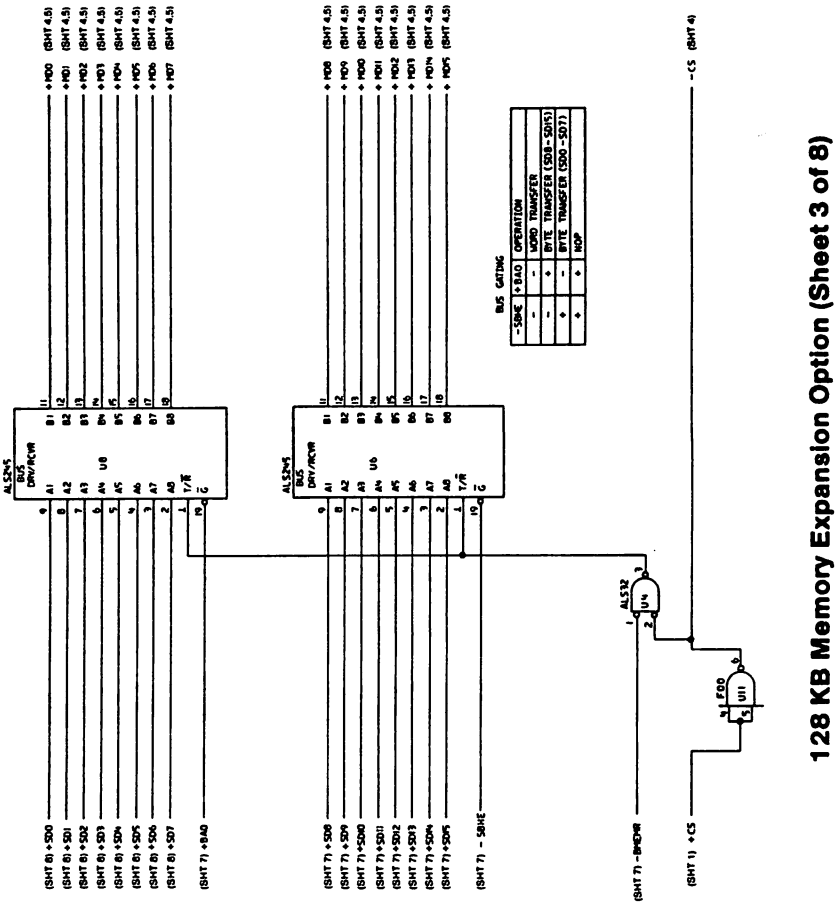

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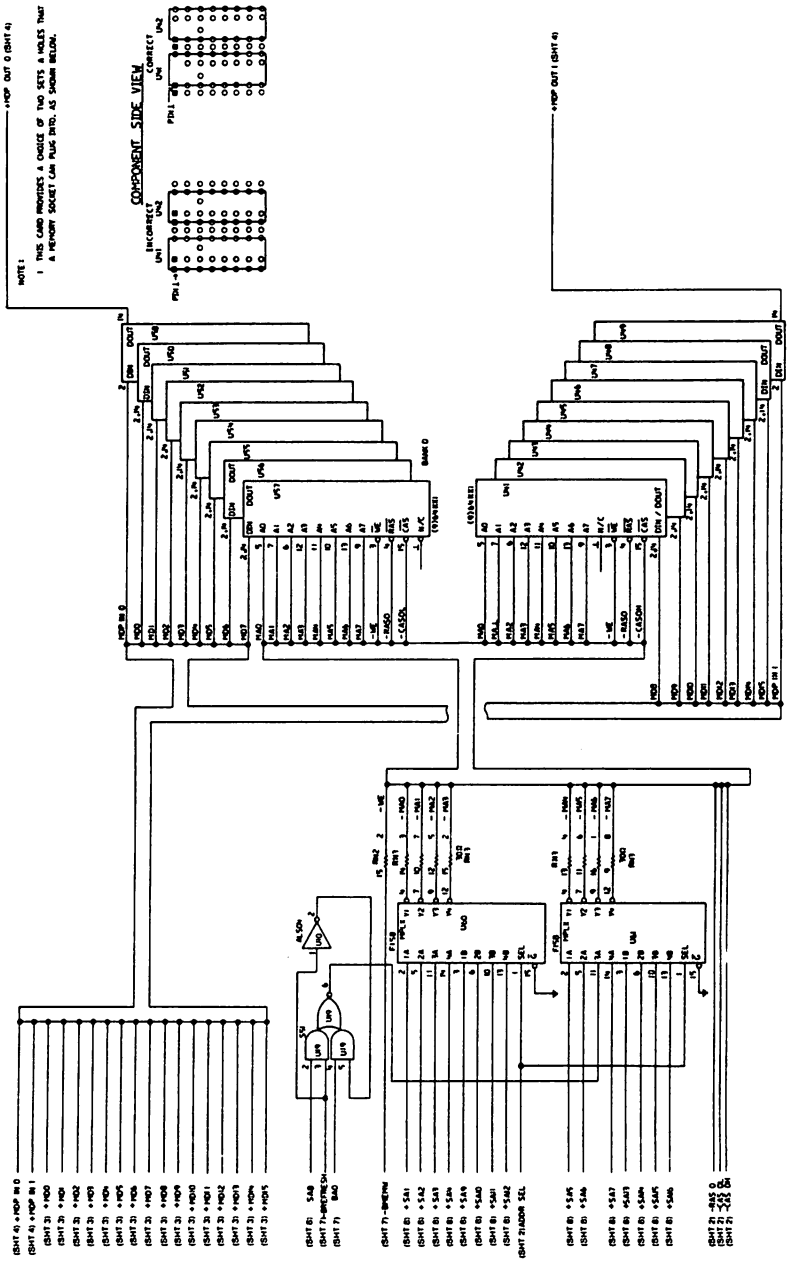

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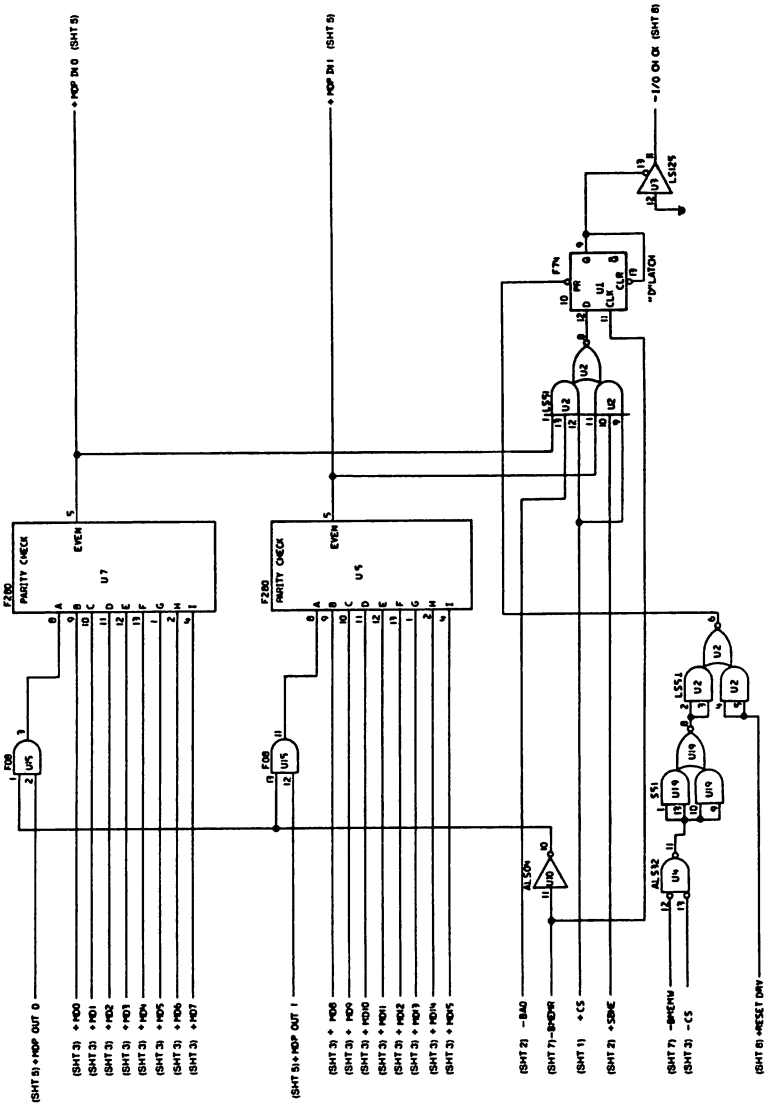

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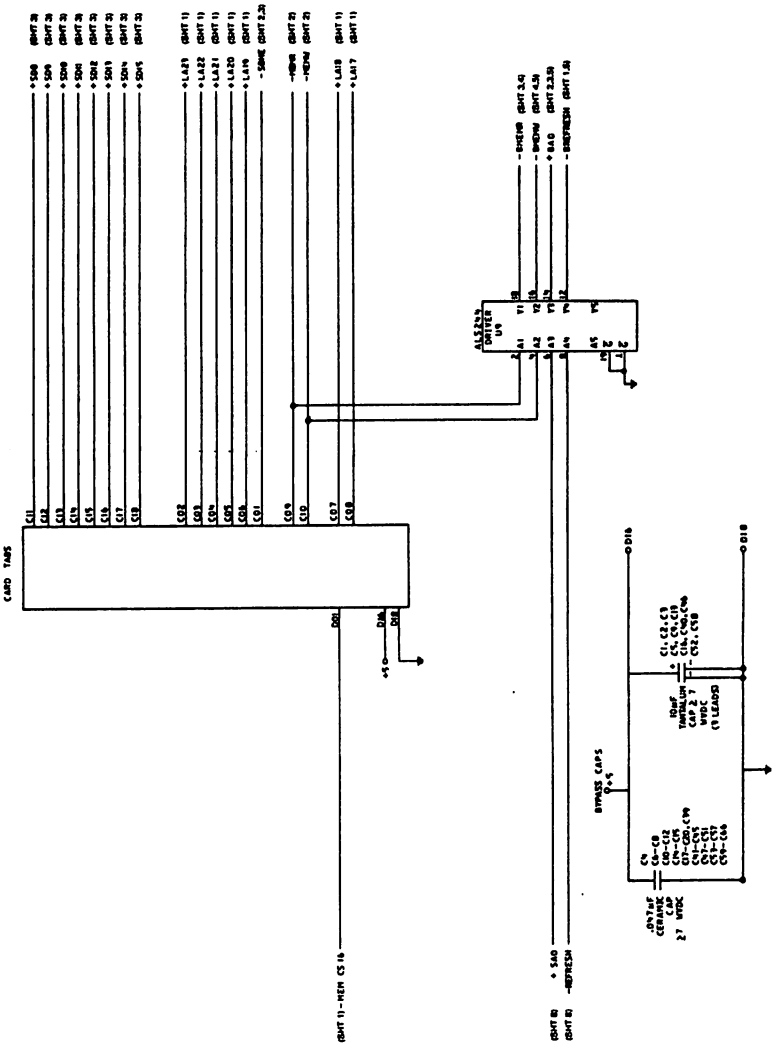

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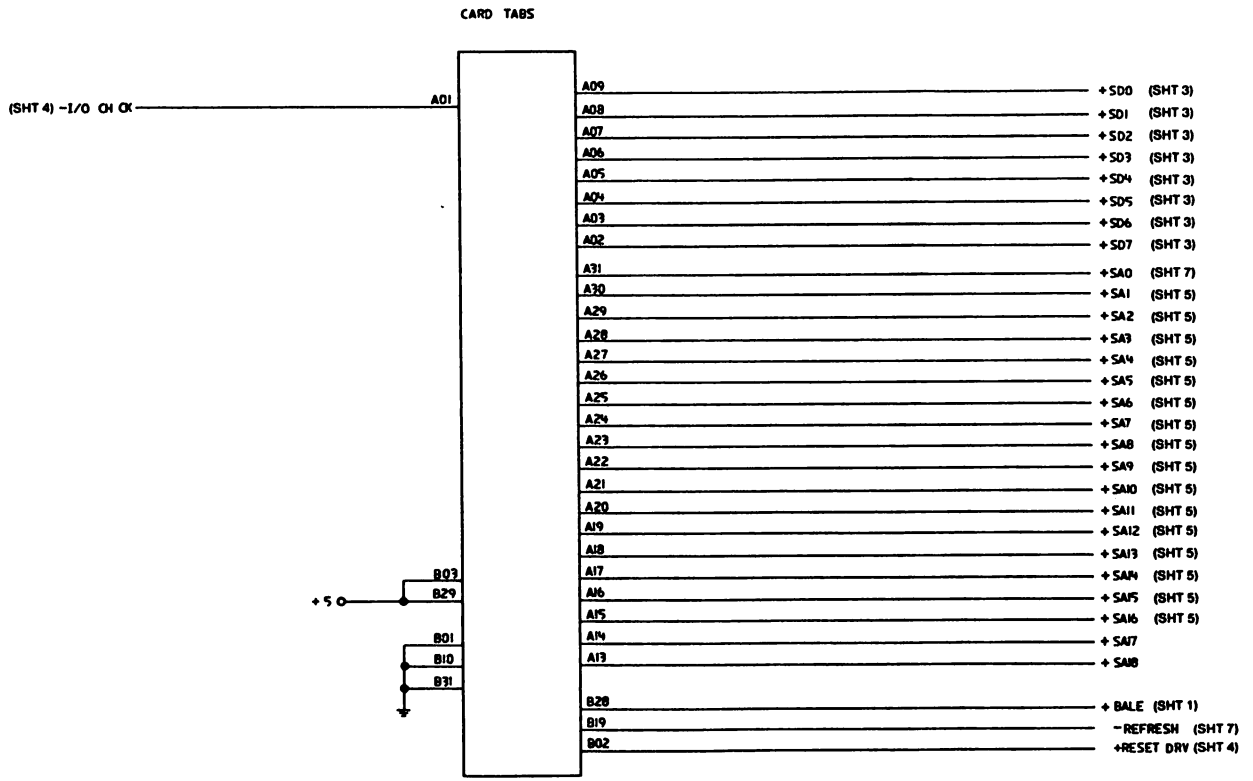

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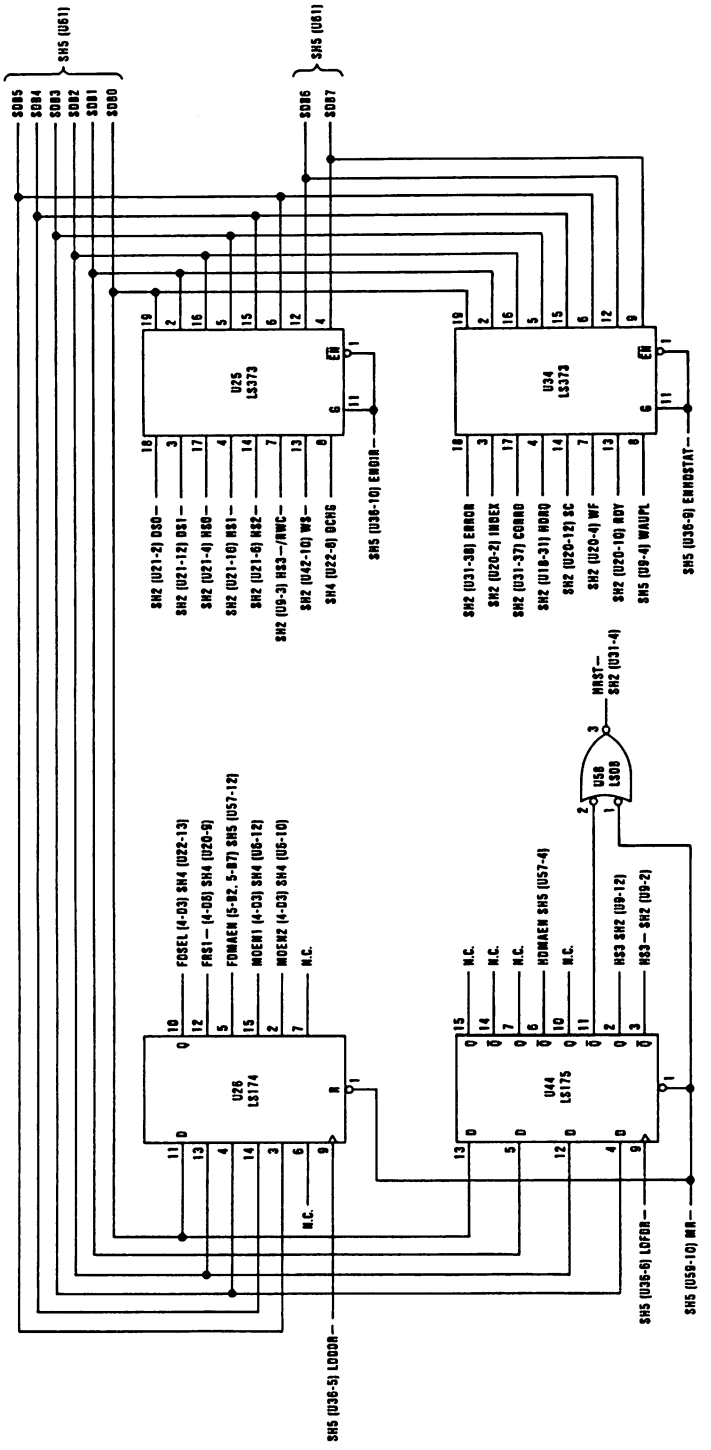

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